

3rd Harmonic Monday Meeting Minutes

Date: September 11, 2006

Time: 9:30 A.M.

Place: Trailer 157 Conference Room

Attendees (P=Present):

C. Antoine		C. Cooper	P	E. Harms	P	A. Rowe	P
T. Arkan		N. Dhanaraj	P	T. Khabiboulline	P	N. Solyak	P
L. Bellantoni		H. Edwards	P	D. Mitchell		W-D Moeller	P
C. Boffo		M. Foley	P	D. Olis	P	G. Wu	
H. Carter	P	C. Ginsburg		P. Pfund	P	Sergio	

Minutes recorded by Dan

Minutes are posted at: http://tdserver1.fnal.gov/dolis/39GHz_minutes.html

3.9GHz Project page is: www-a0.fnal.gov

Meeting Minutes

HOM bodies

- Timer presented RF analyses on new design and variations of it, e.g. single leg option. Simulation work will continue, particularly to understand benefit of a second HOM body added to the end without the main coupler.
- Timer will discuss design with D. Mitchell to get copper model fabricated.
- Mike will check grain sizes on material to be used for rest of HOM bodies. Finer grain is needed to reduce risk of failures.
- DESY analysis is that partial failure of F-probes occurred before etch since outer ring of failed surface is shiny and edges are etched round.
- Mike has some ideas on how to improve welding procedure to reduce risks of thermal cracking.
- Impact of redesign on schedule needs to be tabulated and discussed with DESY.

Cavity-3

- Still in IB-4 for inspection. Allan will have it setup in A0 for another visual inspection of HOM bodies.

Cavity-1, 2

- Missing HOM bodies on cavity-2 will attempted to be blanked off so other testing can be done on cavity. This cavity will eventually have its end-groups cut off and replaced.
- Machined off caps on HOM bodies on cavity-1 will be replaced, thereby leaving the original F-probe design intact.

Input Couplers

- Dan and W-D Moeller visited CPI 8/29. CPI will remedy problem pieces and send first pair of re-worked outer conductors in about 1week. Also, CPI will provide an extra Cold End and Outer Conductor assembly to us.
- Timer presented test results of Q-ext of coupler installed on cavity-1 for room temperature coupling test of antenna to cavity. Results show coupler parts are interchangeable and that antenna tips likely will need to be trimmed. Timer and Wolf-Dietrich will discuss results as well as what Q-ext is desired. They'll present results next week.
- Helen stresses need to further test copper plating. Dan will have some components ultrasonically cleaned as a test of adhesion strength of copper plating. W-D has provided some appropriate power limits on this so as not create holes, pits on copper.

MDL Operation

- Allan reports that the safety report is being written but its contents cannot yet be shared per directive from Romesh.

Other Business

- Harry says that end of fiscal year is approaching and that orders should be placed in the next two weeks to ensure that 18.3 money is spent this year. Place req's soon since many with signature authority will be at KEK.
- Harry, Elvin, and Helen will get together to discuss finances.